

HFUS3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 332

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 27 NOV 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/2100Z TO 27/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 4598 (S11S19) PRODUCED AN M1/1B EVENT AT 27/1847Z WITH A 2695 MHZ RADIO BURST OF 19 SFU. THIS REGION WAS A BETA-GAMMA-DELTA MAGNETIC CONFIGURATION WITH THE COMPLICATED TRAILER SPOT HAVING A NEWLY DEVELOPED OPPOSITE POLE IN ITS NORTHERN PORTION. IT MAINTAINED ITS EKO CLASSIFICATION IN WHITE-LIGHT WITH LITTLE OVER-ALL CHANGE IN AREA, ALTHOUGH ITS SPOT NUMBER DECREASED SLIGHTLY. AN EARLIER C8/1B EVENT AT 27/1058Z WAS ACCOMPANIED BY A 2695 MHZ BURST OF 30 SFU. FOUR LESSER C-LEVEL X-RAY EVENTS OCCURRED DURING THE PERIOD. REGION 4600 (S11E02) CONTINUED ITS SLOW DECAY WITH LITTLE SIGNIFICANT ACTIVITY. NO NEW REGION WAS ASSIGNED. TWO DISAPPEARING FILAMENTS WERE RECORDED: THE FIRST AT 27/1502Z WAS FOUR DEGREES LONG IN REGION 4598 AT S07W14. THE SECOND AT 27/1939Z WAS FIVE DEGREES LONG AGAIN IN REGION 4598 AT S07W19.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGION 4598 PROVIDES A SLIGHT CHANCE OF MODERATE LEVELS THROUGHOUT THE FIRST TWO DAYS (28-29 NOV) AS THE NEWLY COMPLICATED TRAILER SPOT RESTRUCTURES ITSELF AND SIMPLIFIES. RETURNING REGION 4591 (S18, CAR-276) IS EXPECTED AT 30/1200Z WITH VERY LITTLE POTENTIAL FOR ACTIVITY. IT DECAYED TO A SPOTLESS REGION WITH FAINT PLAGE 10 DAYS BEFORE IT CROSSED THE WEST LIMB DURING ITS LAST ROTATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 26/2100Z TO 27/2100Z: GEOMAGNETIC ACTIVITY WAS QUIET TO UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE-TO-BRIEFLY MINOR STORM LEVELS. THIS IS AN ENHANCEMENT ABOVE RECURRENT UNSETTLE-TO-ACTIVE CONDITIONS DUE TO SEVERAL DISAPPEARING FILAMENTS DURING THE 20-23 NOV TIME PERIOD. OCCASIONAL MAJOR STORM LEVELS ARE POSSIBLE AT HIGH LATITUDES DURING LOCAL MIDNIGHT PERIODS. THE TWO DISAPPEARING FILAMENTS OF TODAY ARE NOT EXPECTED TO IMPACT THE MAGNETOSPHERE UNTIL THE OUTLOOK PERIOD (1-2 DEC).

III. EVENT PROBABILITIES 28 NOV-30 NOV

CLASS M 30/20/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 NOV 086

PREDICTED 28 NOV-30 NOV 087/086/084

90 DAY MEAN 27 NOV 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 NOV 007/008

ESTIMATED AFR/AP 27 NOV 007/010

PREDICTED AFR/AP 28 NOV-30 NOV 023/025-020/020-017/020

SOLTERWARN

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